## Communications in Mathematical Physics Volume 230 2002

Chief Editor M. Aizenman, Princeton, NJ

Editorial Board A. Connes, Bures-sur-Yvette

P. Constantin, Chicago, IL

R. Dijkgraaf, Amsterdam

G. Gallavotti, Rome

J. Z. Imbrie, Charlottesville, VA

A. Kupiainen, Helsinki

J. L. Lebowitz, Piscataway, NJ

H. Nicolai, Golm

P. Sarnak, Princeton, NJ

B. Simon, Pasadena, CA

H. Spohn, Munich

L. Takhtajan, Stony Brook, NY

H.-T. Yau, New York, NY

Advisory Board J. L. Cardy, Oxford

L. Faddeev, St. Petersburg

M. E. Fisher, College Park, MD

A. Jaffe, Cambridge, MA

N. Seiberg, Princeton, NJ

N. Seiberg, Frinceton, No

I. Singer, Cambridge, MA

C. N. Yang, Stony Brook, NY





- Bourget A.: Nodal Statistics for the Van Vleck Polynomials 503
- Bricmont J., Kupiainen A., Lefevere R.: Exponential Mixing of the 2D Stochastic Navier-Stokes Dynamics 87
- Connes A., Dubois-Violette M.: Noncommutative Finite-Dimensional Manifolds. I. Spherical Manifolds and Related Examples 539
- Delman C. I., Galperin G.: Billiards with Pockets: A Separation Principle and Bound for the Number of Orbit Types 463
- Dubois-Violette M. → Connes A. 539
- Finster F., Kamran N., Smoller J., Yau S.-T.: Decay Rates and Probability Estimates for Massive Dirac Particles in the Kerr–Newman Black Hole Geometry 201
- Fokas A. S.: Integrable Nonlinear Evolution Equations on the Half-Line 1
- Galperin G. → Delman C. I. 463 Guerra F., Toninelli F. L.: The Thermodynamic Limit in Mean Field Spin Glass Models 71
- Gugg C., Kielhöfer H., Niggemann M.: On the Approximation of the Stochastic Burgers Equation 181
- Hurtubise J. C., Markman E.: Surfaces and the Sklyanin Bracket 485
- Kamran N. → Finster F. 201 Kielhöfer H. → Gugg C. 181

- Kuksin S., Piatnitski A., Shirikyan A.:
  A Coupling Approach to Randomly Forced Nonlinear PDE's. II 81
  Kupiainen A. → Bricmont J. 87
- Lefevere R. → Bricmont J. 87 Lenci M.: Semi-Dispersing Billiards with an Infinite Cusp I 133
- Liu T.-P., Yang T.: Weak Solutions of General Systems of Hyperbolic Conservation Laws 289
- Lott J.: Higher-Degree Analogs of the Determinant Line Bundle 41
- Manojlović N., Samtleben H.: Schlesinger Transformations and Quantum *R*-Matrices 517
- Markman E. → Hurtubise J. C. 485
- Mason L. J., Singer M. A., Woodhouse N. M. J.: Tau-Functions, Twistor Theory, and Quantum Field Theory 389
- Mattingly J. C.: Exponential Convergence for the Stochastically Forced Navier-Stokes Equations and Other Partially Dissipative Dynamics 421
- Neumaier N.: Local v-Euler Derivations and Deligne's Characteristic Class of Fedosov Star Products and Star Products of Special Type 271 Niggemann M. → Gugg C. 181
- Piatnitski A. → Kuksin S. 81
- Samtleben H. → Manojlović N. 517
- Shirikyan A. → Kuksin S. 81
- Singer M. A. → Mason L.J. 389
- Smilga A. V.: Quasiclassical Expansion for Tr $\{(-1)^F e^{-\beta H}\}$  245

Smoller J. → Finster F. 201

Toninelli F. L. → Guerra F. 71

Woodhouse N. M. J. → Mason L. J. 389

Yang T. → Liu T.-P. 289

Yang T., Zhu C.: → Compressible Navier-Stokes Equations with

Degenerate Viscosity Coefficient and Vacuum 329

Yau S.-T. → Finster F. 201

Yuri M.: Multifractal Analysis of Weak Gibbs Measures for Intermittent Systems 365

Zhu C. → Yang T. 329

